

**Defense Information Infrastructure (DII)  
Common Operating Environment (COE)**

**Software Version Description (SVD) for  
Kernel Printer Driver Segment Version 1.0.0.1  
(Solaris 2.5.1)**

**Document Version 1.0**

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# 1. Scope

## 1.1 Identification

This Software Version Description (SVD) describes the Defense Information Infrastructure (DII) Common Operating Environment (COE) Kernel Printer Driver Version 1.0.0.1 (Solaris 2.5.1). The Kernel Printer Driver Version 1.0.0.1 (Solaris 2.5.1), a Government off-the-shelf (GOTS) product, is intended to be used on Sun hardware running the Solaris 2.5.1 Operating System and either the DII COE Version 3.2 Kernel or the DII COE Version 3.0.0.3 Kernel Patch 5 (or a subsequent roll-up patch incorporating DII COE Version 3.0.0.3 Kernel Patch 5 printer functionality).

**NOTE:** Throughout this document, *Courier* font is used to indicate entries to be typed at the keyboard, UNIX commands, file and directory names, and screen text. For example:

The file is located in the `DII_DEV` directory.

## 1.2 System Overview

The DII COE Kernel Printer Driver segment is a data segment that installs six printer drivers for the DII COE Printer Service:

C	PreConfigPS:	a preconfigured postscript printer driver, intended for a PostScript printer that uses software that does not automatically filter print jobs
C	PreConfigPS_r:	a preconfigured reverse postscript printer driver, intended for a PostScript printer that does not automatically filter print jobs and that generates output face-up (causing the security banner to be generated last so that it ends up on top of the printed output)
C	PreConfigRaw:	a preconfigured raw data printer driver, intended for printing via “smart” lp software (i.e., software that can detect the format of the data being printed and filter it appropriately for the printer)
C	PreConfigRaw_r:	a preconfigured reverse raw data printer driver, intended for a printer that uses “smart” lp and that generates output face-up (causing the security banner to be generated last so that it ends up on top of the printed output)
C	ascii:	an ascii printer driver, intended for a printer that only accepts ascii formatted data

C      postscript:              a Solaris postscript printer driver that fixes a problem with printing preformatted PostScript data.

The four preconfigured printer drivers provide the same basic functionality, but each is tailored to a particular printer configuration. They are intended to be used when no other COE Print Driver is available for a particular printer; thus, a printer that has already been set up as a non-COE printer can later be used within the DII COE. If another COE Print Driver is available, it should be used instead of the preconfigured printer driver. The preconfigured printer driver works by “piggybacking” on top of the existing lp printer, using the same configuration and interface files, but it does not provide the same level of integration and seamless operation that a native COE Print Driver can provide.

### 1.3      **Product Information**

**Product Qualification:**      The Kernel Printer Driver segment was validated and accepted by the INRI Systems Engineering Group in accordance with the *Defense Information Infrastructure (DII) Common Operating Environment (COE) Software Test Plan (STP) for Kernel Printer Driver Segment Version 1.0.0.0*, Document Control No. DII.HPSol.Printer.1000.STP-1, October 10, 1997.

**Product Restrictions:**      Copyright Inter-National Research Institute, Inc. 1997, All Rights Reserved. This material may be reproduced by or for the U.S. Government pursuant to the copyright license under the clause at DFARS 252.227-703 (OCT 1988). No other licenses are required for using this software. No freeware or shareware is included.

**Product Dependencies:**      The Kernel Printer Driver segment requires the DII COE Version 3.2 Kernel or the DII COE Version 3.0.0.3 Kernel Patch 5 (Solaris 2.5.1) (or a subsequent roll-up patch incorporating DII COE Version 3.0.0.3 Kernel Patch 5 printer functionality). No implementation constraints or limitations on system configuration apply.

## 2. Referenced Documents

The following documents are referenced in this Software Version Description (SVD):

- C DII.Sol251.Printer.1001.IP-1, *Defense Information Infrastructure (DII) Common Operating Environment (COE) Installation Procedures (IP) for Kernel Printer Driver Segment Version 1.0.0.1 (Solaris 2.5.1)*, October 16, 1997
- C DII.HPSol.Printer.1000.STP-1, *Defense Information Infrastructure (DII) Common Operating Environment (COE) Software Test Plan (STP) for Kernel Printer Driver Segment Version 1.0.0.0*, October 10, 1997
- C DII.HPSol.Printer.1000.STR-1, *Defense Information Infrastructure (DII) Common Operating Environment (COE) Software Test Report (STR) for Kernel Printer Driver Segment Version 1.0.0.0*, October 10, 1997
- C DII.3200.Sol251.AG-1, *Defense Information Infrastructure (DII) Common Operating Environment (COE) Version 3.2.0.0 System Administrator's Guide (Solaris 2.5.1)*, July 25, 1997.

## 3. Version Description

### 3.1 Inventory of Materials Released

Magnetic media: Two 8mm tapes consisting of a relative tar of the DII COE Kernel Printer Driver, Version 1.0.0.1 (Solaris 2.5.1)

Soft-copy Documentation: Four 3.5" floppy diskettes (WordPerfect 6.0 for Windows format) that contain the following documents:

- C *Defense Information Infrastructure (DII) Common Operating Environment (COE) Installation Procedures (IP) for Kernel Printer Driver Segment Version 1.0.0.1, (Solaris 2.5.1)*, Document Control No. DII.Sol251.Printer.1001.IP-1, October 16, 1997
- C *Defense Information Infrastructure (DII) Common Operating Environment (COE) Software Version Description (SVD) for Kernel Printer Driver Segment Version 1.0.0.1, (Solaris 2.5.1)*, Document Control No. DII.Sol251.Printer.1001.SVD-1, October 16, 1997.

Hard-copy Documentation: Two hard copies of the aforementioned documents.

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**NOTE:** Although not part of this Kernel Printer Driver delivery, the *Defense Information Infrastructure (DII) Common Operating Environment (COE) Version 3.2.0.0 System Administrator's Guide (Solaris 2.5.1)*, Document Control No. DII.3200.Sol251.AG-1, July 25, 1997, provides relevant information on how to configure a COE printer. This document applies to both the DII COE Version 3.2.0.0 Kernel and to the DII COE Version 3.0.0.3 Kernel Patch 5.

## 3.2 Inventory of Software Contents

File Name	Version	Date
PrtDriver/data/Driver/PreConfigPS_r/PreConfigPS_r.ddf	N/A	October 1, 1997
PrtDriver/data/Driver/PreConfigPS_r/preconfig	1.0	October 1, 1997
PrtDriver/data/Driver/PreConfigPS_r/preconfig.wrapper	N/A	October 1, 1997
PrtDriver/data/Driver/PreConfigPS/PreConfigPS.ddf	N/A	October 1, 1997
PrtDriver/data/Driver/PreConfigPS/preconfig	1.0	October 1, 1997
PrtDriver/data/Driver/PreConfigPS/preconfig.wrapper	N/A	October 1, 1997
PrtDriver/data/Driver/PreConfigRaw/PreConfigRaw.ddf	N/A	October 1, 1997
PrtDriver/data/Driver/PreConfigRaw/preconfig	1.0	October 1, 1997
PrtDriver/data/Driver/PreConfigRaw/preconfig.wrapper	N/A	October 1, 1997
PrtDriver/data/Driver/PreConfigRaw_r/PreConfigRaw_r.ddf	N/A	October 1, 1997
PrtDriver/data/Driver/PreConfigRaw_r/preconfig	1.0	October 1, 1997
PrtDriver/data/Driver/PreConfigRaw_r/preconfig.wrapper	N/A	October 1, 1997
PrtDriver/data/Driver/postscript/postscript	1.10	October 1, 1997
PrtDriver/data/Driver/postscript/postscript.ddf	N/A	October 1, 1997
PrtDriver/data/Driver/ascii/ascii.ddf	N/A	October 1, 1997
PrtDriver/data/Driver/ascii/ascii	N/A	October 1, 1997

### 3.3 Changes Installed

Reference the below table for a list of the Kernel Printer Driver software changes.

DII COE Kernel Printer Driver (Solaris 2.5.1) Software Changes
<b>Total Software Changes: [1]</b>
<b>INRI Number:</b> RTO00002069
<b>Agency Number:</b> N/A
<b>Short Description:</b> Reconfiguration of Print Driver failure.
<b>Long Description:</b> The reconfigure driver failed to print with the NewsPrintDriver. This is also applicable to the HP platform using other COTS drivers.

Once the Kernel Printer Driver segment is installed, the new drivers will appear available for selection in the `Printer Model/Type` field of the Add Printer window provided by the DII COE Kernel system administration option `SA System>Printers>Printer Administrator:`

```
ASCII Printer
PostScript printer
Preconfigured PostScript Printer
Preconfigured PostScript Printer (reverse)
Preconfigured Printer
Preconfigured Printer (reverse).
```

### 3.4 Waivers

The following document waivers have been approved since these documents do not apply to the Kernel Printer Driver, which is a data segment. References to other documents are provided as applicable below:

- C Software Product Specification (SPS)
- C Database Design Document (DBDD)
- C System Administrator's Manual (SAM): Since the Kernel Printer Driver segment is a data segment that does not have a unique Human-Computer Interface (HCI), this manual is not applicable. The information required to support the user is provided in this SVD and in Section 4.5, *Initializing the Software*, of the *Defense Information Infrastructure (DII) Common Operating Environment (COE) Installation Procedures (IP) for Kernel Printer Driver Version 1.0.0.1 (HP-UX 10.20)*.

- C User's Manual (UM)/Operator's Manual (OM): Since the Kernel Printer Driver segment is a data segment that does not have a unique HCI, this manual is not applicable. The information required to support the user is provided in this SVD and in Section 4.5, *Initializing the Software*, of the *Defense Information Infrastructure (DII) Common Operating Environment (COE) Installation Procedures (IP) for Kernel Printer Driver Version 1.0.0.1 (HP-UX 10.20)*.
- C Programmer's Manual (PM)
- C API Reference Manual (APIRM)
- C Software Test Description (STD): Since the Printer test procedures delivered with the DII COE 3.2 Kernel were used for testing, the previously delivered documentation is referenced in the *Defense Information Infrastructure (DII) Common Operating Environment (COE) Software Test Plan (STP) for Kernel Printer Driver Segment Version 1.0.0.0* and in the *Defense Information Infrastructure (DII) Common Operating Environment (COE) Software Test Report (STR) for Kernel Printer Driver Segment Version 1.0.0.0*, Document Control No. DII.HPSol.Printer.1000.STR-1.
- C Software Requirements Specification (SRS).

### **3.5      Adaptation Data**

None.

### **3.6      Installation Instructions**

For instructions on installing the Kernel Printer Driver segment, refer to the *Defense Information Infrastructure (DII) Common Operating Environment (COE) Installation Procedures (IP) for Kernel Printer Driver Version 1.0.0.1 (Solaris 2.5.1)*, Document Control No. DII.Sol251.Printer.1001.IP-1, October 16, 1997.

The Kernel Printer Driver Version 1.0.0.1 requires 74KB of disk space.

### **3.7      Possible Problems and Known Errors**

No known problems or errors exist.

## 4. Notes

### 4.1 Kernel Printer Driver Release Notes

1. Most printers should be able to use the preconfigured raw data printer driver. If you are unsure whether to use the raw data print driver or the postscript driver, try the raw data driver first.
2. To set up a printer using a preconfigured printer driver, perform the following steps. For details on how to create a new COE printer, see the *Defense Information Infrastructure (DII) Common Operating Environment (COE) Version 3.2.0.0 System Administrator's Guide (Solaris 2.5.1)*, Document Control No. DII.3200.Sol.1020.AG-1, July 25, 1997.
  - a. Create an lp printer queue by using either the built-in system facilities (e.g., *admintool*) or third-party software (e.g., *NeWSprint*). The printer name *must* begin with an underscore (“\_”).
  - b. After creating the lp printer queue, use the SA System>Printer>Printer Administrator option to add a new COE printer. The Printer Name field entry must be the same as the lp printer name, but *without the leading underscore*. Select the printer Host Name and the Printer Port Name as usual, then choose one of the following preconfigured printer drivers available for Printer Model/Type:  
  
Preconfigured PostScript Printer  
Preconfigured PostScript Printer (reverse)  
Preconfigured Printer  
Preconfigured Printer (reverse).